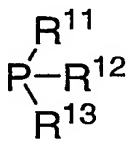
CLAIMS

1. A process for the preparation of a metal-organic compound, comprising at least one phosphinimine ligand, characterized in that the HA adduct of a phosphinimine ligand according to formula 1 is contacted with a metal-organic reagent of formula 2 in the presence of at least 2 equivalents of a base, wherein HA represents an acid, of which H represents its proton and A its conjugate base,

with **Y=N-H** as formula 1,

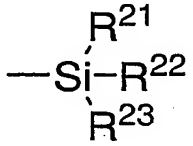
and $\mathbf{M^{V}(L_1)_k(L_2)_l(L_3)_m(L_4)_nX}$ as formula 2,

and wherein Y is defined by the formula:



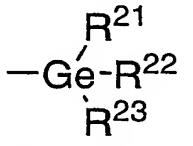
(formula 3)

wherein each R^{1j}, with j = 1-3 is independently selected from the group consisting of a hydrogen atom, a halogen atom, a C_{1-8} alkoxy radical, a C_{6-10} aryl or aryloxy radical, an amido radical, or a C_{1-20} hydrocarbyl radical unsubstituted or substituted by a halogen atom, a C_{1-8} alkoxy radical, a C_{6-10} aryl or aryloxy radical, an amido radical, a silyl radical of the formula:



(formula 4)

or a germanyl radical of the formula:



(formula 5)

wherein R^{2j} is independently selected from the group consisting of hydrogen, a C_{1-8} alkyl or alkoxy radical, C_{6-10} aryl or aryloxy radicals, each substituent R^{1j} or R^{2j} may be linked with another R^1 or R^2 to form a ring system,

and M represents a group 4 or group 5 metal ion

V represents the valency of the metal ion, being 3, 4 or 5

L_1, L_2, L_3, and L_4 represent a ligand or a group 17 halogen atom on M and may be equal or different,

k, l, m, n = 0, 1, 2, 3, 4 with k+l+m+n+1=V, and

X represents a group 17 halogen atom.

2. A process according to claim 1, wherein the base is an organic base, an inorganic base or a metal-organic base.

3. A process according to claim 1-2, wherein the organic base is an amine or a phosphane.

4. A process according to claim 1-3, wherein the organic base is a dialkylamine, a trialkylamine, a monoarylamine, diarylamine or a triarylamine.

5. A process according to claim 1-4, wherein the base is triethylamine, pyridine, tripropylamine, tributylamine, 1,4-diaza-bicyclo[2.2.2]octane, pyrrolidine or piperidine.

6. A process according to claim 1-2, wherein the inorganic base is a carboxylate, a fluoride, a hydroxide, a cyanide, an amide, a carbonate of Li, Na, K, Rb, Cs, or an ammonium salt or a group 2 metal salt of Mg, Ca, or Ba thereof, an alkali metal (Li, Na, K, Rb, Cs) phosphate, or phosphate ester, or their alkoxides or phenoxides, thallium hydroxide, alkylammonium hydroxides or fluorides, or alkali metals, hydrides or carbonates of Li, Na, K, Rb, Cs or group 2 hydrides.

7. A process according to claim 6, wherein the alkali metal is chosen from Li, Na, or K.

8. A process according to claim 1-2, wherein the metal-organic base is a group 1, 2, 12, 13 hydrocarbanion.

9. A process according to claim 8, wherein the metal-organic base is an organomagnesium- or an organolithium compound.

10. A process according to claim 1,2, 8 or 9, carried out in the presence of at least 3 respectively 4 equivalents of an organolithium- or an organomagnesium compound.

11. A process according to claim 1-10 wherein the reaction is carried out in an aprotic solvent.

12. A process according to claim 11, wherein the solvent is the base.

13. Process for the preparation of a polyolefin by making a metal-organic compound according to the process of claims 1 – 12, wherein the base is an olefin polymerisation compatible base, which metal-organic compound is activated anywhere in, or before a polymerisation equipment.

14. Process according to claim 13, wherein the metal-organic compound is used without purification.

15. Process according to claim 13 or 14, wherein the metal-organic compound is

formed in the polymerisation equipment.

16. Process according to claim 15, in the presence of between 5 and 10 equivalents of the imine ligand according to formula 1.